

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

Claim 1 (Currently Amended):      A method comprising:  
    comparing information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations; ~~and~~  
    identifying a subset of the combinations of electrodes based on the comparison; and  
    presenting a list of the combinations of electrodes within the subset to a user,  
    wherein the combinations of electrodes within the subset are presented to the user in a  
    random order.

Claim 2 (Currently Amended):      The method of claim 1, further comprising receiving at least some of the filter information from a the user.

Claim 3 (Currently Amended):      The method of claim 1, further comprising:  
    receiving information describing a configuration of the set of electrodes from a the user;  
and  
    determining at least some of the filter information based on the configuration.

Claim 4 (Original):    The method of claim 1, wherein the filter information identifies a number of electrodes for valid electrode combinations.

Claim 5 (Original):    The method of claim 1, wherein the filter information identifies a fixed polarity of one of the electrodes of the electrode set for valid electrode combinations.

Claim 6 (Original): The method of claim 1, wherein the filter information identifies a relational characteristic of electrodes within a valid combination of electrodes.

Claim 7 (Original): The method of claim 1, wherein information that identifies a combination of electrodes includes information that identifies at least two active electrodes from the set and the polarities of the identified active electrodes.

Claim 8 (Currently Amended)      ~~The A method comprising: of claim 1, further comprising~~  
receiving information that describes a configuration of ~~the a~~ set of electrodes from a user;  
~~user, wherein comparing information that identifies combinations of electrodes to filter~~  
~~information comprises:~~

iteratively generating information that identifies combinations of electrodes based on the configuration information; ~~and~~

comparing the information generated for each of the combinations to ~~the~~ filter  
information that relates to at least one characteristic of valid electrode combinations; and  
identifying a subset of the combinations of electrodes based on the comparison.

Claim 9 (Original): The method of claim 8, wherein iteratively generating information that identifies combinations of electrodes comprises:

identifying a first valid combination of electrodes based on the filter information; and  
beginning the iterative generation of information that identifies combinations of electrodes at the first valid combination of electrodes.

Claims 10 and 11 (Cancelled).

Claim 12 (Currently Amended):      The method of claim ~~10~~ 1, wherein the user is a clinician.

Claim 13 (Currently Amended):     ~~The A method of claim 1, comprising:~~  
  comparing information that identifies combinations of electrodes from within a set of  
electrodes to filter information that relates to at least one characteristic of valid electrode  
combinations;  
  identifying a subset of the combinations of electrodes based on the comparison; and  
  ~~further comprising~~ sequentially configuring the electrodes within the set of electrodes  
according to a randomized ordering of the combinations of electrodes within the subset for  
testing of the combinations of electrodes within the subset on a patient.

Claim 14 (Cancelled).

Claim 15 (Original): The method of claim 1, further comprising storing the filter information as  
a description of the subset of combinations of electrodes.

Claim 16 (Original): The method of claim 1, wherein the set of electrodes is implanted within a  
patient.

Claim 17 (Currently Amended):     A computer-readable medium comprising instructions that  
cause a programmable processor to:

  compare information that identifies combinations of electrodes from within a set of  
electrodes to filter information that relates to at least one characteristic of valid electrode  
combinations; ~~and~~  
  identify a subset of the combinations of electrodes based on the comparison; and  
  present a list of the combinations of electrodes within the subset to a user,  
  wherein the combinations of electrodes within the subset are presented to the user in a  
random order.

Claim 18 (Currently Amended):     The computer-readable medium of claim 17, further  
comprising instructions that cause a programmable processor to receive at least some of the filter  
information from a the user.

Claim 19 (Currently Amended): The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to:

receive information describing a configuration of the set of electrodes from a the user;

and

determine at least some of the filter information based on the configuration.

Claim 20 (Original): The computer-readable medium of claim 17, wherein the filter information identifies a number of electrodes for valid electrode combinations.

Claim 21 (Original): The computer-readable medium of claim 17, wherein the filter information identifies a fixed polarity of one of the electrodes of the electrode set for valid electrode combinations.

Claim 22 (Original): The computer-readable medium of claim 17, wherein the filter information identifies a relational characteristic of electrodes within a valid combination of electrodes.

Claim 23 (Currently Amended): ~~The~~ A computer-readable medium comprising instructions that cause a programmable processor to:

compare information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations; and

identify a subset of the combinations of electrodes based on the comparison,  
~~of claim 17,~~ wherein information that identifies a combination of electrodes includes information that identifies at least two active electrodes from the set, and the polarities of the identified active electrodes.

Claim 24 (Currently Amended):     ~~The~~ A computer readable medium ~~of claim 17, further~~  
comprising instructions that cause a programmable processor to:

~~receiving~~ receive information that describes a configuration of ~~the~~ a set of electrodes from  
a user; ~~user, wherein the instructions that cause a programmable processor to compare-~~  
~~combinations of electrodes to filter information comprise instructions that cause a programmable~~  
~~processor to:~~

iteratively generate information that identifies combinations of electrodes based on the  
configuration information; ~~and~~

compare the information generated for each of the combinations to ~~the~~ filter information  
that relates to at least one characteristic of valid electrode combinations; and

identify a subset of the combinations of electrodes based on the comparison.

Claim 25 (Original): The computer-readable medium of claim 24, wherein the instructions that  
cause a programmable processor to iteratively generate information that identifies combinations  
of electrodes comprise instructions that cause a programmable processor to:

identify a first valid combination of electrodes based on the filter information; and

begin the iterative generation of information that identifies combinations of electrodes  
with the first valid combination of electrodes.

Claims 26 and 27 (Cancelled).

Claim 28 (Currently Amended):     The computer-readable medium of claim ~~26~~ 17, wherein  
the user is a clinician.

Claim 29 (Currently Amended): ~~The~~ A computer-readable medium ~~of claim 17, further~~ comprising instructions that cause a programmable processor ~~to~~ to:

compare information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations;

identify a subset of the combinations of electrodes based on the comparison; and  
sequentially configure the electrodes within the set of electrodes according to a randomized ordering of the combinations of electrodes within the subset for testing of the combinations of electrodes within the subset on a patient.

Claim 30 (Cancelled).

Claim 31 (Original): The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to store the filter information as a description of the subset of combinations of electrodes.

Claim 32 (Cancelled).

Claim 33 (Currently Amended): A device comprising:

a user interface; and

a processor to compare information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations, and identify a subset of the combinations of electrodes based on the comparison, wherein the processor receives at least some of the filter information from a user via the user interface, and presents a list of the combinations of electrodes within the subset in a random order to the user via the user interface.

Claim 34 (Currently Amended):     ~~The~~ A device comprising:

a user interface; and  
a processor to compare information that identifies combinations of electrodes from within  
a set of electrodes to filter information that relates to at least one characteristic of valid electrode  
combinations, and identify a subset of the combinations of electrodes based on the comparison,  
wherein the processor receives at least some of the filter information from a user via the  
user interface, and  
~~of claim 33,~~ wherein the processor receives information describing a configuration of the  
set of electrodes from the user via the user interface, and determines at least some of the filter  
information based on the configuration.

Claim 35 (Original): The device of claim 33, wherein the filter information identifies a number  
of electrodes for valid electrode combinations.

Claim 36 (Original): The device of claim 33, wherein the filter information identifies a fixed  
polarity of one of the electrodes of the electrode set for valid electrode combinations.

Claim 37 (Original): The device of claim 33, wherein the filter information identifies a  
relational characteristic of electrodes within a valid combination of electrodes.

Claim 38 (Currently Amended):     ~~The~~ A device comprising:

a user interface; and  
a processor to compare information that identifies combinations of electrodes from within  
a set of electrodes to filter information that relates to at least one characteristic of valid electrode  
combinations, and identify a subset of the combinations of electrodes based on the comparison,  
wherein the processor receives at least some of the filter information from a user via the  
user interface, and  
~~of claim 33,~~ wherein information that identifies a combination of electrodes includes  
information that identifies at least two active electrodes from the set and the polarities of the  
identified active electrodes.

Claim 39 (Currently Amended):     ~~The A device of claim 33, wherein the comprising:~~  
\_\_\_\_\_ a user interface; and  
\_\_\_\_\_ a processor that receives information describing a configuration of the a set of electrodes  
from the a user via the user interface, iteratively generates information that identifies  
combinations of electrodes based on the configuration information, and compares the  
information generated for each of the combinations to the filter information that relates to at least  
one characteristic of valid electrode combinations, and identifies a subset of the combinations of  
electrodes based on the comparison, wherein the processor receives at least some of the filter  
information from the user via the user interface.

Claim 40 (Original): The device of claim 39, wherein processor identifies a first valid combination of electrodes based on the filter information, and begins the iterative generation of information that identifies combinations of electrodes at the first valid combination of electrodes.

Claims 41 and 42 (Cancelled).

Claim 43 (Currently Amended):     ~~The of claim 33, further comprising~~ A device comprising:  
\_\_\_\_\_ a user interface;  
\_\_\_\_\_ a processor to compare information that identifies combinations of electrodes from within  
a set of electrodes to filter information that relates to at least one characteristic of valid electrode  
combinations, and identify a subset of the combinations of electrodes based on the comparison,  
wherein the processor receives at least some of the filter information from a user via the user  
interface; and

\_\_\_\_\_ a telemetry circuit to communicate with an implantable medical device, the implantable  
medical device coupled to the electrode set via at least one lead, wherein the processor directs the  
implantable medical device to sequentially configure the electrodes within the set of electrodes  
according to the combinations of electrodes within the subset via the telemetry circuit for testing  
of the combinations of electrodes within the subset on a patient.



Claim 44 (Original): The device of claim 43, wherein the processor directs the implantable medical device to sequentially configure the electrodes of the set of electrodes according to a randomized ordering of the combinations of electrodes within the subset.

Claim 45 (Original): The device of claim 33, further comprising a memory to store the filter information as a description of the subset of combinations of electrodes.

Claim 46 (Original): The device of claim 33, wherein the user is a clinician.

Claim 47 (Original): The device of claim 33, wherein the device comprises a programming device.

Claim 48 (Original): The device of claim 33, wherein the device comprises a handheld computer.

Claim 49 (Original): The device of claim 33, wherein the user interface comprises at least one of a keypad, a display, a pointing device, and a touch-screen.

Claim 50 (Original): The device of claim 33, wherein the set of electrodes is implanted within a patient.